Yian Su, Ph.D. Candidate

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Education

Sep. 2021 – present	🔖 **Ph.D., Northwestern University**, Computer Science. Advisor: *Simone Campanoni* Research Interest: *Parallelizing & Optimizing Compilers, Runtime Scheduling Techniques, Heterogeneous Systems.*
Sep. 2018 – Jun. 2020	🔖 **Master's, Northwestern University**, Computer Science. Advisor: *Simone Campanoni* Thesis: *A Better Memory Understanding for Program Dependence Graph through Static-Value Flow Analysis.*
Sep. 2017 – Jun. 2018	🔖 **University of Illinois at Chicago**, Electrical and Computer Engineering. *Senior-year Exchange Program.* Advisor: *Vladimir Goncharoff* Project: *Intelligent Shopping Cart.*
Sep. 2014 – Jun. 2017	🔖 **Bachelor's, Northeastern University (China)**, Computer Science.

Publications

Conference Proceedings

1. **Y. Su**, M. Rainey, N. Wanninger, *et al.,* "Compiling loop-based nested parallelism for irregular workloads," in *Proceedings of the 29th ACM International Conference on Architectural Support for Programming Languages and Operating Systems.*, ser. ASPLOS '24, 2024.

2. A. Matni, E. A. Deiana, **Y. Su**, *et al.,* "Noelle offers empowering llvm extensions," in *Proceedings of the 20th IEEE/ACM International Symposium on Code Generation and Optimization,* ser. CGO '22, Virtual Event, Republic of Korea: IEEE Press, 2022, pp. 179–192, ISBN: 9781665405843. 🔗 DOI: 10.1109/CGO53902.2022.9741276.

3. C. Wang, **Y. Su**, L. Zhou, S. Peng, Y. Yuan, and H. Huang, "A virtual network embedding algorithm based on hybrid particle swarm optimization," in *Smart Computing and Communication*, Cham: Springer International Publishing, 2017, pp. 568–576, ISBN: 978-3-319-52015-5.

arXiv

1. Z. Xu, Y. Chon, **Y. Su**, *et al., Prompt: A fast and extensible memory profiling framework*, 2023. arXiv: 2311.03263 [cs.PF].

Teaching Experience

Sep. 2019 – Dec. 2019	🔖 **Teaching Assistant,** Northwestern University. *Introduction to Database Systems and Data Warehouse.*

Work Experience

Jun. 2020 – Sep. 2021 **Software Development Engineer,** Amazon.com.
Collaborated with experienced cross-disciplinary Amazonians to conceive, design, and bring innovative products and services to market in an agile environment for delivering high-quality software

Jun. 2019 – Sep. 2019 **Software Development Engineer Intern,** Amazon.com.
Designed, implemented an automated data pipeline to generate a new feature in Amazon's search process in order to decrease search defects rate

Skills

Programming Languages C, C++, Java, Python, Lisp, Perl, SQL, JavaScript, Markdown, LaTeX.

Softwares LLVM, Git, Visual Studio, Jupyter Notebook.

Miscellaneous

Awards

May 2018 **Winner**, Computer Engineering Category at UIC EXPO 2018.

Nov. 2017 **National Scholarship**, Northeastern University.

Nov. 2016 **National Scholarship**, Northeastern University.

Leadership

Sep. 2018 **Vice President of Membership**. Northwestern Toastmasters Club.

Apr. 2016 **Vice President**. International Communication Club @ Northeastern University.